**Инструкция по развертыванию ДЗ-2**

Обозначения:

Команда: >>

Действие: \*…\*

Границы файла:

--

…

--

Имя узла: <имя>

Требуется выполнить следующие команды в терминале:

>> ssh team@<хост входа>

\*ввод пароля по требованию\*

>> sudo -i -u hadoop

\*ввод пароля по требованию\*

>> ssh tmpl-nn

>> rm -r /tmp/hadoop-hadoop/

>> ssh tmpl-dn-00

>> rm -r /tmp/hadoop-hadoop/

>> exit

>> ssh tmpl-dn-01

>> rm -r /tmp/hadoop-hadoop/

>> exit

>> hadoop-3.4.0/bin/hdfs namenode -format

>> hadoop-3.4.0/sbin/start-dfs.sh

>> exit

>> exit

>> sudo vim /etc/nginx/sites-available/nn

\*вставляем содержимое\*

--

# You should look at the following URL's in order to grasp a solid understanding# of Nginx configuration files in order to fully unleash the power of Nginx.

# https://www.nginx.com/resources/wiki/start/

# https://www.nginx.com/resources/wiki/start/topics/tutorials/config\_pitfalls/

# https://wiki.debian.org/Nginx/DirectoryStructure

#

# In most cases, administrators will remove this file from sites-enabled/ and

# leave it as reference inside of sites-available where it will continue to be

# updated by the nginx packaging team.

#

# This file will automatically load configuration files provided by other

# applications, such as Drupal or Wordpress. These applications will be made

# available underneath a path with that package name, such as /drupal8.

#

# Please see /usr/share/doc/nginx-doc/examples/ for more detailed examples.

##

# Default server configuration

#

server {

listen 9870 default\_server;

#listen [::]:80 default\_server;

# SSL configuration

#

# listen 443 ssl default\_server;

# listen [::]:443 ssl default\_server;

#

# Note: You should disable gzip for SSL traffic.

# See: https://bugs.debian.org/773332

#

# Read up on ssl\_ciphers to ensure a secure configuration.

# See: https://bugs.debian.org/765782

#

# Self signed certs generated by the ssl-cert package

# Don't use them in a production server!

#

# include snippets/snakeoil.conf;

root /var/www/html;

# Add index.php to the list if you are using PHP

index index.html index.htm index.nginx-debian.html;

server\_name \_;

location / {

auth\_basic "Administrator's Area";

auth\_basic\_user\_file /etc/.htpasswd;

# First attempt to serve request as file, then

# as directory, then fall back to displaying a 404.

# try\_files $uri $uri/ =404;

proxy\_pass http://tmpl-nn:9870;

}

# pass PHP scripts to FastCGI server

#

#location ~ \.php$ {

# include snippets/fastcgi-php.conf;

#

# # With php-fpm (or other unix sockets):

# fastcgi\_pass unix:/run/php/php7.4-fpm.sock;

# # With php-cgi (or other tcp sockets):

# fastcgi\_pass 127.0.0.1:9000;

#}

# deny access to .htaccess files, if Apache's document root

# concurs with nginx's one

#

#location ~ /\.ht {

# deny all;

#}

}

# Virtual Host configuration for example.com #

# You can move that to a different file under sites-available/ and symlink that

# to sites-enabled/ to enable it.

#

#server {

# listen 80;

# listen [::]:80;

#

# server\_name example.com;

#

# root /var/www/example.com;

# index index.html;

#

# location / {

# try\_files $uri $uri/ =404;

# }

#}

--

>> sudo -i -u hadoop

>> cd hadoop-3.4.0/etc/hadoop/

>> sudo vim yarn-site.xml

\*меняем файл на следующий\*

--

<?xml version="1.0"?>

<!--

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-->

<configuration>

<!-- Site specific YARN configuration properties -->

<property>

<name>yarn.nodemanager.aux-services</name>

<value>mapreduce\_shuffle</value>

</property>

<property>

<name>yarn.nodemanager.env-whitelist</name>

<value>JAVA\_HOME,HADOOP\_COMMON\_HOME,HADOOP\_HDFS\_HOME,HADOOP\_CONF\_DIR,CLASSPATH\_PREPEND\_DISTCACHE,HADOOP\_YARN\_HOME,HADOOP\_HOME,PATH,LANG,TZ,HADOOP\_MAPRED\_HOME</value>

</property>

<property>

<name>yarn.resourcemanager.hostname</name>

<value>tmpl-nn</value>

</property>

<property>

<name>yarn.resourcemanager.address</name>

<value>tmpl-nn:8032</value>

</property>

<property>

<name>yarn.resourcemanager.resource-tracker.address</name>

<value>tmpl-nn:8031</value>

</property>

</configuration>

--

>> vim mapred-site.xml

--

<?xml version="1.0"?>

<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

<!--

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-->

<!-- Put site-specific property overrides in this file. -->

<configuration>

<property>

<name>mapreduce.framework.name</name>

<value>yarn</value>

</property>

<property>

<name>mapreduce.application.classpath</name>

<value>$HADOOP\_HOME/share/hadoop/mapreduce/\*:$HADOOP\_HOME/share/hadoop/mapreduce/lib/\*</value>

</property>

</configuration>

--

>> scp mapred-site.xml tmpl-dn-00:/home/hadoop/hadoop-3.4.0/etc/hadoop

>> scp mapred-site.xml tmpl-dn-01:/home/hadoop/hadoop-3.4.0/etc/hadoop

>> scp mapred-site.xml tmpl-nn:/home/hadoop/hadoop-3.4.0/etc/hadoop

>> scp yarn-site.xml tmpl-dn-00:/home/hadoop/hadoop-3.4.0/etc/hadoop

>> scp yarn-site.xml tmpl-dn-01:/home/hadoop/hadoop-3.4.0/etc/hadoop

>> scp yarn-site.xml tmpl-nn:/home/hadoop/hadoop-3.4.0/etc/hadoop

>> ssh tmpl-nn

>> hadoop-3.4.0/sbin/start-yarn.sh

>> exit

>> mapred --deamon start historyserver

>> exit

>> exit

>> sudo cp /etc/nginx/sites-available/nn /etc/nginx/sites-available/ya

>> sudo cp /etc/nginx/sites-available/nn /etc/nginx/sites-available/dh

>> sudo vim /etc/nginx/sites-available/ya

\*заменяем порт 9870 везде на 8088\*

>> sudo vim /etc/nginx/sites-available/dh

\*заменяем порт 9870 везде на 19888\*

>> sudo ln -s /etc/nginx/sites-available/ya /etc/nginx/sites-enabled/ya

>> sudo ln -s /etc/nginx/sites-available/dh /etc/nginx/sites-enabled/dh

>> sudo systemctl reload nginx

>> exit

>> ssh -L 9870:127.0.0.1:9870 -L 8088:127.0.0.1:8088 -L 19888:127.0.0.1:19888 team@176.109.81.245